



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

DARRYL N. BROWN  
COMMISSIONER

MEMORANDUM

TO: Board of Environmental Protection  
FROM: Kurt Tidd PE., Bureau of Air Quality  
SUBJECT: ecomaine  
DATE: June 16, 2011

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**Statutory and Regulatory References:**

Department Regulations 06-096 CMR 115 and 140 authorizes the Department to impose reasonable and appropriate license conditions to ensure compliance with emission standards, regulations or orders. Ecomaine operates its facility under the terms and conditions of Air Emission License A-283-70-A-I and amendments.

**Location:**

Portland, Maine

**Description:**

Ecomaine violated requirements of its Air Emission License and amendments by failing Cadmium and Lead stack tests. The Consent Agreement includes a monetary penalty of Twenty Four Thousand Two Hundred Eighteen dollars (\$24,218.00) of which Four Thousand Eight Hundred Forty Four dollars (\$4,844.00) was paid as a civil monetary penalty and Nineteen Thousand, Three Hundred and Seventy Four dollars (\$19,374.00) was spent on a Supplemental Environmental Project (SEP). The SEP is consistent with Department Policy. The SEP is a mercury thermostat recycling program and is more fully described in Appendix A of the Consent Agreement.

**Environmental Issues:**

The Department relies on the licensing of facilities to ensure compliance with State Laws and Regulations. Through the licensing process, the Department is able to control the amount and types of pollutants that are emitted to the atmosphere within the State.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04679-2094  
(207) 764-0477 FAX: (207) 760-3143

**Department Recommendation:**

Staff recommends approval of the Consent Agreement which requires ecomaine to comply with the requirements of Maine's Rule 06-096 CMR 140 and Air Emissions License A-283-70-A-I and provides for penalties in the amount of \$4,844.000 as a civil penalty and \$19,374.00 as a SEP project. The monetary penalty was calculated with the existing BAQ penalty policy guidance, and after consultation and agreement with the Department of the Attorney General.



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IN THE MATTER OF:

ECO MAINE d/b/a ecomaine	)	ADMINISTRATIVE CONSENT
CUMBERLAND COUNTY	)	AGREEMENT
PORTLAND, MAINE	)	
A-283-70-A-I	)	
EIS # 2010-034-A	)	

This Agreement, by and among Eco Maine d/b/a ecomaine ("ecomaine"), the Maine Department of Environmental Protection ("Department"), and the Maine Office of the Attorney General, is entered into pursuant to the laws concerning the Department's *Organization and Powers*, 38 M.R.S.A. § 347-A(1).

The parties agree as follows:

1. Ecomaine is a nonprofit corporation organized and existing under the laws of the State of Maine, is registered to do business in Maine. Ecomaine operates a waste to energy facility under standard and specific conditions of Air Emissions License A-283-71-A-I and amendments.
2. The violations described herein took place at ecomaine's waste to energy facility located in Portland, Maine.
3. During times relevant to this Agreement, ecomaine was subject to Maine's *Protection and Improvement of Air* laws ("Air Act"), 38 M.R.S.A. §581-610 C, Maine's air quality rules ("Air Rules"), 06-096 CMR 100 et seq. and Air Emission License A-283-70-A-I and amendments.
4. Throughout the period of time addressed in this Agreement, ecomaine was subject to Air Emissions License A-283-70-A-I, condition (14)(F), which states in relevant part:

(14) Municipal Waste Combustors A and B

The following requirements apply to each MWC individually, unless otherwise noted.

F. Visible Emissions

Visible Emissions from each MWC flue shall not exceed 10% opacity on a six-minute block Average [MEDEP Chapter 121]

5. Excess Emission and Quarterly reports submitted by ecomaine to the Department for the third quarter of 2007 through the fourth quarter of 2009 describe the following incidents of excess opacity in violation of the requirements stated in paragraph four (4) above:

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<u>Combustors A and B</u>	<u>Year</u>	<u>Incidents (6 minute blocks)</u>
	2007 (7/1-12/31)	4
	2008	10
	2009	40

6. Throughout the period of time addressed in this Agreement, ecomaine was subject to Air Emissions License A-283-71-A-N, condition (14)(E)(1), which states in relevant part:

(14) Municipal Waste Combustors A and B

The following requirements apply to each MWC individually, unless otherwise noted.

E. Emission Limits

1. ecomaine shall operate each MWC unit so the following concentration emission limits are not exceeded:

CO 100 ppmvd @ 7% O2

7. Excess Emission and Quarterly reports submitted by ecomaine to the Department for the third quarter of 2007 through the fourth quarter of 2009 describe the following incidents of excess CO (24 hour average) in violation of the requirements stated in paragraph six (6) above:

<u>Combustor A</u>	<u>Year</u>	<u>Violations (4 hour Average)</u>
	2007 (7/1-12/31)	1
	2008	3
	2009	4

<u>Combustor B</u>	<u>Year</u>	<u>Violations (4 hour Average)</u>
	2007 (7/1-12/31)	1
	2008	6
	2009	5

8. The Department's Rule for *Emissions Limitations and Emission Testing of Resource Recovery Facilities*, 06-096 CMR 121(5)(A)(3), states in relevant part:

5. Large Municipal Waste Combustor Units Subject to 40 CFR Part 60 Subpart Cb

For all Large municipal waste combustor units for which construction is commenced on or before September 20, 1994 and for all designated units as set forth in 40 CFR Part 60 Subpart Cb the following shall apply:

**A. Emission Limiting Standards.** As set forth in 40 CFR Part 60 Subpart Cb, the emissions limits are hereby adopted and incorporated by reference except where the state may have established more stringent standards as specified in this subsection.

An owner or operator may request that compliance with the following applicable emission standards be determined using carbon dioxide measurements corrected to an equivalent of seven (7) percent oxygen, determined in accordance with 40 CFR Part 60 Subpart Eb.

(3) **Cadmium and Lead.** The emission limit for cadmium contained in the gases discharged to the atmosphere from a designated unit is 0.035 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. The emission limit for lead contained in the gases discharged to the atmosphere from a designated unit is 0.40 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

9. Ecomaine performed annual testing for cadmium and lead on A and B Boilers on November 2, 2009. The results of the performance testing yielded excess emissions of cadmium of 0.050 mg/dscm and excess emissions of lead of 0.47 mg/dscm in Boiler A in violation of requirements of paragraph eight (8) above. Ecomaine retested the A Boiler on November 19, 2009 for cadmium and lead with results of 0.032 mg/dscm for cadmium and 0.36 mg/dscm for lead. Each day of operation following the compliance test date and prior to a demonstration of compliance constitutes a separate violation.
10. Department Staff notified ecomaine by a Notice of Violation (NOV) sent on March 10, 2010 of the Air Emissions violations described in paragraphs five (5), seven (7) and nine (9).
11. For the purposes of this Agreement, ecomaine agrees that it received proper notice of all violations identified herein pursuant to 38 M.R.S.A. § 347-A(1)(B).
12. Pursuant to 38 M.R.S.A. §§ 341-D(6)(C) and 347-A(1)(A)(1), administrative consent agreements must be approved by the Board of Environmental Protection ("Board"), which is part of the Department.
13. This Agreement shall become effective only if it is approved by the Board and the Office of the Attorney General.
14. To resolve the violations identified in paragraphs five (5), seven (7) and nine (9) of this Agreement, ecomaine agrees to:

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CUMBERLAND COUNTY	)	AGREEMENT
PORTLAND, MAINE	)	
A-283-70-A-I	)	
EIS # 2010-034-A	)	

- a. Pay, upon signing this Agreement, a civil monetary penalty in the sum of Twenty Four Thousand, Two Hundred and Eighteen dollars (\$24,218.00) for the violations set forth herein as follows:
  - i. Pay to the Treasurer, State of Maine, immediately upon signature of this Agreement a civil monetary penalty in the amount of Four Thousand, Eight Hundred and Forty Four dollars (\$4,844.00).
  - ii. Pay the amount of Nineteen Thousand, Three Hundred and Seventy Four dollars (\$19,374.00) for the purpose of undertaking the "Stimulating Thermostat Recycling Program for Licensed Technicians of ecomaine Communities" more fully described in Appendix A.
  - iii. Any public statement, oral or written, in print, film, or other media, made by ecomaine making reference to the SEP described above shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action taken by the Maine Department of Environmental Protection for air emission violations."
  - iv. Any payments made by ecomaine pursuant to the SEP described above are not tax deductible and are ineligible for certification as tax exempt pollution control facilities pursuant to 36 M.R.S.A. §§ 105, 211.
15. The Department and Office of the Attorney General grant a release of their cause of action against ecomaine for the specific violations listed in paragraphs five (5), seven (7) and nine (9) of this Agreement on the express condition that all actions listed in paragraph fourteen (14) of this Agreement are completed in accordance with the express terms and conditions of this Agreement. The release shall not become effective until all requirements of this Agreement are satisfied.
16. Non-compliance with this Agreement voids the release set forth in paragraph fifteen (15) of this Agreement and may lead to an enforcement action pursuant to 38 M.R.S.A. § 347-A(1)(A), 347-A(5), or 348, as well as pursuit of other remedies.
17. Actions taken pursuant to this Agreement shall be completed in accordance with the requirements of all local, state and federal laws, including but not limited to licensing requirements.
18. The provisions of this Agreement shall apply to, and be binding on, the parties, their officers, agents, servants, employees, successors, and assigns, and upon those persons in active concert or participation with them who receive actual notice of this Agreement.

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IN WITNESS HEREOF the parties hereto have executed this Agreement of five (5) pages.

ECOMAINE

BY: *Kevin J. Roche* 4-21-11  
Title *General Manager* DATE

MAINE BOARD OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
Susan M. Lessard, Chair DATE

MAINE OFFICE OF THE ATTORNEY GENERAL

BY: \_\_\_\_\_  
Gerald Reid, Assistant Attorney General DATE

**APPENDIX A: MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP)  
PROPOSAL BY ecomaine**

**(a) Project Name**

*Stimulating Thermostat Recycling Program for  
Licensed Technicians of ecomaine Communities*

**(b) Project Implementer**

*ecomaine  
64 Blueberry Road  
Portland, ME 04102*

**(c) Geographic Area to Benefit from the Project:**

*The people of the State of Maine would benefit by reducing mercury in the environment through the collection, transportation and recycling of old thermostats which contain mercury (Hg). Both the Maine Legislature and Maine Department of Environmental Protection (MDEP) have also expressed interest in mercury reduction as evidenced in promulgated rules for product stewardship and reduction in stack emissions through Statute 38 MRSA Ch 4 Section 585-B and MDEP Chapter 121: Emission Limitations and Emission Testing of Resource Recovery Facilities.*

*More specifically, the ecomaine Member and Associate Member Municipalities, who continue to advocate for environmental stewardship, would benefit including: Baldwin, Bridgton, Cape Elizabeth, Casco, Cumberland, Falmouth, Freeport, Gorham, Gray, Harrison, Hiram, Hollis, Limington, Lyman, Naples, North Yarmouth, Ogunquit, Parsonsfield, Porter, Portland, Pownal, Saco, Scarborough, South Portland, Standish, Waterboro, Windham and Yarmouth.*

**(d) Enforcement Action**

*The Air Bureau of the MDEP developed a Consent Agreement (CA) for violations of ecomaine's air emissions license A-283-70-A-I from third quarter of 2007 (3Q07) to fourth quarter of 2009 (4Q09). The total of the CA penalty is \$24,218 which include \$2875 – opacity; \$3683 - carbon monoxide and \$17,660 – stack test.*

*Under Maine law, Title 38, section 349(2-A) of the Maine Revised Statutes, the Maine Department of Environmental Protection and Maine Department of the Attorney General (AG) are authorized to settle civil enforcement actions with agreements that include environmentally beneficial efforts, known as Supplemental Environmental Projects (SEPs). Upon approval by the Board of Environmental Protection (BEP) based on the recommendation of the office of the MDEP Commissioner and the AG's office, an SEP can be funded with up to 80% of a penalty. Based on the fee assessed in discussion between ecomaine and the MDEP the available SEP amount is \$19,374.*

**(e) Type of Project**

*According to the SEP guidance document, the MDEP will consider proposals that meet the SEP definition in at least one of seven categories. ecomaine's proposed project falls under the category for Pollution Prevention. The SEP defines a pollution prevention project as eliminating all or a significant portion of pollutants at the point of generation. The elimination or reduction of mercury in the environment will come about by stimulating an existing MDEP program, namely the Thermostat Recycling Program.*



**APPENDIX A: MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP)**

**PROPOSAL BY ecomaine**

**(f) Project Description**

*ecomaine* will offer to double the monetary incentive currently offered by the Thermostat Recycling Program by targeting the thousands of technicians in the communities of *ecomaine* to return the mercury laden thermostats they remove from buildings and bringing them to *ecomaine* for payment. The benefit of collecting mercury from this source translates in removing Hg from the wastestream and eliminating its release from the stack.

*ecomaine* has met with the facilitator of the MDEPs Thermostat Recycling Program, Ann Pistell, an Environmental Specialist in the Division of Solid Waste Management and collaboratively propose the following program:

The program will occur over 18 months from project approval by the BEP or when the SEP funds are exhausted – whichever is first. Within 30 days of SEP approval, a Memo will be submitted to the licensed technicians that work in *ecomaine* Owner Communities and Associate Member Communities describing the initiative to encourage the drop off of Hg thermostats for proper recycling. In exchange, the technician will be eligible for a \$10 refund, twice the former \$5 incentive.

To be eligible for the incentive, the thermostat must contain mercury and must have the cover in-tact with the brand name clearly visible. Ineligible products will not qualify for reimbursement nor will broken or leaking thermostats. The thermostats are the only Hg containing items that will be honored in this program (ie: no CFLs nor thermometers, etc).

The technician will bring their thermostats to *ecomaine*'s Scale House for collection during regular operating hours (Monday – Friday, 6:00 am - 5:00 pm; Saturday, 6:00 am – 1:00 pm) and submit a Thermostat Recycling Program Invoice Form with completed name, address and type of thermostat delivered. A check in the amount of \$10 per qualifying thermostat will be sent to the addressee on the form. The deadline by which a check will be issued to a qualified technician will occur within 30 days of the drop-off date to allow time to verify acceptance of the thermostat.

*ecomaine* employees will be trained on the proper processing in receiving the thermostats by Ann Pistell, MDEP, and on how to inventory the collected thermostats and package them for shipping to Thermostat Recycling Corporation (TRC) in Rosslyn, Virginia. TRC will reimburse *ecomaine* \$5 per thermostat submitted. *ecomaine* will contribute \$5 (for a total of \$10) for each thermostat recovered. The \$19,343.40 will cover the \$5 rebate and costs for handling and processing the thermostats by *ecomaine*. It is anticipated that approximately 3900 thermostats could be collected.

According to Ann Pistell, the average thermostat contains 4 grams of Hg which translates into removing (4 grams Hg x 3900 units = 15,600 grams) 34.4 pounds of mercury from the environment. MDEP collected 7000 thermostats in 2010 but has a target for 10,000 in 2011. This SEP program will contribute toward achieving the MDEP goal as well as help determine if an increase in the incentive and a reduction in paperwork could stimulate greater participation by technicians. Based on a survey conducted by Ms.

**APPENDIX A: MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP)**

**PROPOSAL BY ecomaine**

*Pistell in Summer of 2010, over three-hundred respondents indicated that some limitations in the program exist (ie: too long before TRC paid them or they were not paid at all; inconvenient collection points; too much paperwork; and too small a monetary incentive to be worth the effort to recycle). The ecomaine SEP proposal would test whether changes to the thermostat program would be beneficial by limiting paperwork, paying technicians reliably and within a reasonable timeframe and increasing the incentive. ecomaine's SEP could help create incentives to inspire greater participation and enthusiasm to continue recycling mercury containing thermostats by technicians.*

*The SEP proposed herein, has an opportunity to contribute significantly to the MDEPs program on recycling thermostats and the betterment of the State of Maine's proactive stance in regard toward environmental stewardship.*

*Actions taken pursuant to this project shall be completed in accordance with the requirements of all applicable local, state, and federal laws, rules, and orders. In addition to the mercury regulations cited above, ecomaine was issued a certificate for Universal Waste activities by MDEP in 2005, which authorizes ecomaine to handle mercury containing thermostats.*

**(g) Existing Regulatory Requirements**

*The Thermostat Recycling Program was initiated in 2005 and a ban on disposal of Hg containing thermostats was implemented in 2006. The existing regulatory requirements for mercury emissions are articulated in Statute 38 MRSA Ch 4 Section 585-B of 25 pounds of Hg release per year or a 90% removal efficiency and MDEP Chapter 121, emission limitations and emission stack testing of resource recovery facilities for Hg.*

**(h) Total Project Budget**

*Based on the SEP fine (\$24,218), the maximum available amount of the penalty 80% (\$19,374.40) will be used to contribute toward this project. The balance of any SEP funds not paid toward the project by the completion date shall be paid to the Treasurer, State of Maine within 30 days of the project completion date.*

**(i) Project Schedule**

*ecomaine would like to commence the process as soon as approval is granted from the Attorney General's Office and the Board of Environmental Protection. As noted previously, the project completion date will occur 18 months from the project approval date or when the SEP funds are exhausted – whichever is first. And to reiterate, the balance of SEP funds will be paid to the State of Maine at the completion of the project.*

**(j) Expected Project Benefits**

*The expected project benefits will include an assessment of how an increase in the incentive amount and reduction in paperwork may encourage technicians to recycle mercury containing thermostats. This data will prove valuable for State authorities as they continue to reduce mercury from the environment and will also benefit ecomaine and other WTE facilities by removing Hg from the wastestream.*

**(k) Reporting**

**APPENDIX A: MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP)**

**PROPOSAL BY ecomaine**

*The following reports and documentation applicable to the proposed SEP will be submitted to the Maine DEP within 30 days of exhaustion of SEP funds:*

- *A detailed report outlining the results of the program*
- *A break down of how the results will benefit the MDEP*

**(I) Certification**

*The proposed SEP is not the result of substantive planning that occurred prior to the enforcement action.*

*Submitted by:*

A handwritten signature in dark ink, appearing to read "Anne K. Hewes".

Anne K. Hewes, Ph.D.

Environmental Manager, ecomaine